

WHAT IS CLAIMED IS:

1. A dynamic focus amplifier for generating a focus voltage for a focus electrode of a cathode ray tube, comprising:

5 a source of a high voltage;

a pull-up transistor responsive to a control voltage and coupled to said source of said high voltage and to a capacitive load for generating a first dynamic focus voltage portion of said focus voltage in said capacitive load;

10 a source of a periodic dynamic focus input signal at a frequency related to a deflection frequency; and

a pull-down transistor responsive to said input signal and coupled to said capacitive load to amplify said input signal for generating a second dynamic focus voltage portion of said focus voltage in said capacitive load, said capacitive load being coupled to said pull-up transistor for generating said control voltage of said pull-up transistor from a charge
15 stored in said capacitive load.

2. The amplifier according to Claim 1, further comprising a storage capacitor wherein said pull-down transistor is coupled to said storage capacitor for generating said control voltage in said storage capacitor from said charge stored in said capacitive load.

20

3. The amplifier according to claim 2, wherein said pull-down transistor couples said storage capacitor to said capacitive load for generating said control voltage in said storage capacitor, during a first portion of a period of said periodic dynamic focus input signal.

25

4. The amplifier according to claim 3, further comprising a semiconductor switch for preventing a transfer of a charge from said storage capacitor to said capacitive load, during a second portion of said period of said periodic dynamic focus input signal.

30 5. The amplifier according to claim 2, wherein said storage capacitor is coupled between a control terminal and a main current conducting terminal of said pull-up transistor.

6. The amplifier according to claim 2, wherein said storage capacitor is charged

by a pull-down current flowing from said capacitive load through said pull-down transistor during a portion of a period of said input signal.

7. The amplifier according to claim 2, further comprising an impedance coupled
5 to said source of said high voltage and to at least said storage capacitor for charging said storage capacitor, during a start-up operation.

8. The amplifier according to claim 2, further comprising a zener diode coupled
to said storage capacitor for limiting said control voltage.

10

9. The amplifier according to claim 1, wherein said input signal includes a signal
component at a frequency related to at least one of a horizontal deflection frequency and a
vertical deflection frequency.

15

10. A dynamic focus amplifier for generating a focus voltage for a focus terminal
of a cathode ray tube, comprising:

a source of a high voltage;

a pull-up transistor having a first main current conducting terminal coupled to
said source of said high voltage and a second main current conducting terminal coupled to a
20 capacitive load for developing a first portion of said focus voltage in said capacitive load from
said high voltage;

a storage capacitor;

a source of a periodic dynamic focus input signal at a frequency related to a
deflection frequency; and

25

a pull-down transistor having an input, control terminal coupled to said
periodic dynamic focus input signal source and a main current conducting terminal coupled to
said capacitive load to amplify said input signal for generating a second portion of said focus
voltage in said capacitive load, said main current conducting terminal of said pull-down
transistor being coupled to said storage capacitor for generating a control voltage in said
30 storage capacitor that is coupled to a control terminal of said pull-up transistor.

11. The amplifier according to claim 10, wherein said input signal includes a signal
component at a frequency related to at least one of a horizontal deflection frequency and a

vertical deflection frequency.